



DATE: September 19, 1984

TO: Virginia Yang, Enforcement Program
RJ GS

FROM: Rich Johnson and Glenn Savage, DLPC/FOS, Central Region

SUBJECT: LPC # 03900504 - DEWITT COUNTY - CLINTON/REVERE COPPER

EPA Region 5 Records Ctr.



315343

ENFORCEMENT REFERRAL MEMORANDUM

We are submitting this memo to the Enforcement Decision Group for their consideration.

Two Compliance Inquiry Letters have been sent to the Revere Copper & Brass plant in Clinton. The first CIL was dated 4-22-83 (attachment 1). The response dated 5-10-83 (attachment 2) addressed each of the apparent violations listed on the CIL. All of the apparent violations except for the operating record of deficiencies appeared to have sufficient information in the letter to infer they have been corrected. Since there was no enclosures with the letter verifying the corrections had been made, a second ISS Inspection was made. A second CIL (attachment 3) was the result of the inspection. The CIL (dated 6-21-84) alleged the following apparent violations:

1. 725.116(d)(2). The job description for employees that handle hazardous waste did not include any of the duties that relate to handling hazardous waste.
2. 725.173(b)(1). The operating record lacked the quantity and physical state of the hazardous waste being stored, and the date when the waste began storage.
3. 725.173(b)(2). The operating record was incorrect in that the storage location for the F006 sludge had changed.
4. Subpart G: Closure. The facility's closure plan did not include: How closure will minimize the need for further maintenance at the site and protect the environment and human health (725.211(a), 725.211(b), and 725.212(a)(1)); the date of closing the storage facility (725.217(a)(1) and (4)); the maximum extent of the inventory in the storage area (725.212(a)(2)); the steps needed to be taken to decontaminate facility equipment (725.212(a)(3)); the time the waste can be stored after the last volume of waste is brought to the storage area and how long complete closure should take (725.212(a)(1) and (4), 725.213); what will be done to equipment and structures after closure (725.214); and the certification requirements (725.215).
5. 725.273(a). Containers holding hazardous waste were being stored open.

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6. 725.243. The financial mechanisms for financial assurance has not been accepted.

The response to the 6-21-84 CIL received on 7-27-84 was deemed inadequate for the following reasons:

1. It did not address the closure requirements at all; and
2. It did not mention the correction of the inadequate financial mechanisms.

The other apparent violations in the CIL were addressed by the response and a re-inspection is necessary to determine whether they have been corrected.

Revere's letter states that the facility wants to withdraw their Part A and interim status as a storage facility. Since they plan to withdraw their Part A they don't think they have to be subject to the 725 regulations. Until they go through closure and have documentation from the USEPA that the Part A has been withdrawn they need to continue meeting the RCRA regulations for a storage facility.

Due to the facility's failure to take steps to correct the alleged violations in the 6-21-84 CIL, we recommend Revere be considered for enforcement.

RCJ/js

Attachments

cc: DLPC/Division File
DLPC/FOS, Central Region

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REMARKS

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Use this section to briefly describe site activities observed at the time of the inspection. Note any possible violations of Interim Status Standards.

An Interim Status Standards (ISS) Inspection of the Revere Copper & Brass plant in Clinton was conducted on October 12, 1984. Interviewed at the time were Anthony Taubert, Chief Chemist and Terry Sampson, Mgr. of Safety & Worker's Compensation.

The facility has submitted a letter (dated 7/15/84) to the USEPA requesting a withdrawal of their Part A interim status as a storage facility. According to Mr. Taubert, Revere has not yet received a response from the USEPA. The facility will continue to be considered a storage facility until they have gone through an approved closure. During the inspection, it was learned that the facility has been storing wastewater treatment (WWT) sludge on-site for longer than 90 days after they had generated a 1,000 or more Kg. of the waste. The site qualifies as a storer and generator of hazardous waste subject to the hazardous waste regulations in Title 35 Illinois Administrative Code (35 IL. A. C.).

Revere manufactures copper-clad stainless kitchen utensils and fabricates stampings from various metals for the trade.

Hazardous wastes generated from processes at the facility include:

1. Spent copper plating solution (D002);
2. Spent stripping solution called dip-off (D002);
3. Spent brightening solution (D002 & D007);
4. Spent cleaning solution in the finishing department (D002);
5. Mercurous nitrate waste from the on-site lab (D009); and
6. Wastewater treatment sludge (F006).

The spent copper plating solution (SCP) is generated by 3 plating lines in which copper is added on to the bottom of stainless steel kitchen utensils. When the solution is changed, the spent solution is piped into 2 fiberglass tanks located alongside the manufacturing plant. Mr. Taubert said occasionally they can re-introduce some of the SCP solution back into the plating operation, but that most of it is treated. The SCP solution goes through 2 reclaim tanks where an electrical current is applied. This takes out some of the metals from the solution. Mr. Taubert said the metals (mostly copper and chrome) removed from the reclaim tanks are either sold to a scrap yard or sold to another division in their company for reuse. The SCP solution passes from the reclaim tanks to the facility's on-site WWT unit. In the WWT unit it is pH adjusted, coagulated, filtered and put in a press. This procedure forms the WWT sludge (F006). Revere has a NPDES Permit (IL #0002356) to operate the treatment unit, but their permit is currently expired. They are trying to get the permit renewed. The effluent from the WWT unit discharges into 2 on-site lagoons before entering a surface ditch that joins Coon Creek. Treatment received by the SCP solution in the reclaim tanks does not appear to be subject to the 725 Regulations. The waste entering the reclaim tanks appear to be exempt from Title 35 IL. A. C. 722 through 725, CFR 122 through 124 and notification requirements 3010 of the Resource Conservation and Recovery Act (RCRA) under 721.106(a)(1) & (2), because constituents (metals) in it are being beneficially reclaimed. Treatment received by the SCP solution that

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enters the WWT unit appears to be exempted from the 725 treatment regulations because the unit meets the definition of a WWT unit (720.110), and therefore, qualifies for the 725.101(c)(10) exemption.

A stripping waste is generated at the facility's finishing department. Two apx. 500 gallon tanks contain a combination of sulfuric acid and hydrogen peroxide. The solution is used to strip off copper from the bottom of a flawed utensil so the stainless steel body can be reused. When the tank's solutions lose their effectiveness, they are pumped into the 2 fiberglass tanks used to hold the spent copper plating (SCP) solution. The stripping wastes eventually go through the reclaim tanks and the WWT unit just as the SCP solution does. Therefore, the spent stripping waste is subject to the same regulations as the SPC waste.

The spent brightening solution is generated in the finishing department. A chrome solution composed of sodium dichromate and sulfuric acid is used to put a chrome coating on some of the metal parts to brighten the items, and prevent rust. A 30 to 35 gallon polyurethane barrel seated in a metal tank is used to dip the parts in. The waste generated from the barrel is pumped into the 2 fiberglass holding tanks that contain the SCP solution. The spent brightening solution eventually goes through the reclaim tanks and the WWT unit just as the SCP solution does. Therefore, the spent brightening solution is subject to the same regulations as the SCP solution.

A cleaning solution of sulfuric acid and nitric acid is used in the finishing department to take tarnish and other discolorations off brass and bronze parts. A 30 to 35 polyurethane barrel seated in a metal tank is used to dip the parts in. The waste from the barrel is pumped into the 2 fiberglass tanks that contain the SCP solution. The spent cleaning solution eventually goes through the reclaim tanks and the WWT unit just as the SCP solution does. Therefore, the spent cleaning solution is subject to the same regulations as the SCP solutions.

The mercurous nitrate waste is generated at the facility's on-site lab. The 3 barrels of mercurous nitrate waste mentioned on the 3/1/84 ISS Inspection have been treated and dewatered. Mr. Taubert said the waste had been condensed down to about 1 or 2 pounds. They want to collect more of the waste before sending a sample to the Mercury Refining Company in New York. Revere is trying to interest Mercury Refining in possibly reclaiming the mercury from the waste. The waste is kept in the lab at the present time.

The last hazardous waste listed above is the facility's WWT sludge. The sludge is considered a F006 listed hazardous waste because it is a WWT sludge that is formed from an electroplating operation. The sludge is collected in open metal containers set up under the WWT unit's filter press.

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R E M A R K S
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When the container is full, it is transferred to a storage area south of the WWT unit. The containers are taken to the shipping docks at the east end of the Tube Mill after they contact their transporter to make a pickup. Revere is currently using Frink's Industrial Service (ILD #080502741 and SWH #0015) in Pecatonica to haul the sludge. The waste is to be hauled to the Ce Cos hazardous waste management site in Ohio for disposal. At the time of the inspection, Mr. Taubert estimated they are storing about 50,000 lbs. of the waste. They began holding the wastes and looking for another hazardous waste site after learning Chemetco (their previous hazardous waste management site) did not have an Illinois permit to handle hazardous waste.

The chrome plating operation at the facility apparently does not generate hazardous wastes, as indicated on the previous inspection. Mr. Taubert said they do not need to change the plating solution (they end up adding more solution to the tank), and there is no sludge generated.

Rinse waters from the chrome plating operations and acidic rinse waters from the finishing department go into a chrome reduction/pH adjustment treatment unit. From the treatment unit they went onto the WWT unit.

Apparent violations of the Illinois Pollution Control Board's Regulations on hazardous waste management include:

1. 725.114(c) - warning signs;
2. 725.115(b) - inspection schedule;
3. 725.115(d) - inspection logs;
4. 725.152(a) - emergency procedures (725.156);
5. 725.242(b) - update of the closure cost estimate;
- *6. Apparent inadequacies in the closure plan as outlined in the June 21, 1984 Agency letter (725.212);
7. 725.273(a) - containers holding hazardous waste are to be closed during storage; and
- *8. 725.243 - financial assurance for facility closure.

*Closure plans are now reviewed by Mr. Rama Chaturvedi's unit in Land Pollution's Permit Section. A copy of the closure plan will be sent over to this Unit for their consideration. Mr. Chaturvedi's unit also is responsible for reviewing the Financial Assurance Mechanisms.

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C O M M E N T S

Comment #1 - Wastewater treatment sludge (F006) was being stored at two locations in the tube mill during the inspection. Neither location had a warning sign with "Danger - Unauthorized Personnel Keep Out" - or an equivalent legend - posted near it.

Comment # 2 - The facility had discontinued documenting inspections of the storage areas by means of inspection logs. Mr. Taubert said he was under the impression that the information being kept in the operating record could be used in place of the inspection records. He was told that this was not the case, the information obtained for the operating record does not require the same information as the inspection log. The last inspection log in the facility's files was dated 2/27/84.

The facility was also found to be in apparent violation of not maintaining an inspection schedule since 2/27/84. While the inspection logs were being completed they also appeared to satisfy the 725.115(b) requirement for an inspection schedule. Once the logs were discontinued, the facility also became in apparent violation of not having an inspection schedule.

Comment #3 - The job descriptions of employees that handle hazardous waste were found to be inadequate on the March 1, 1984 ISS Inspection because they did not include the RCRA duties assigned to the person. This appeared to have been corrected by the time of the present inspection.

The personnel that handle hazardous waste include laboratory technicians, millwrights/maintenance workers and employees in the finishing department. The lab technicians handle the mercurous nitrate waste, the millwrights move and load the wastewater treatment sludge and the finishing employees handle the dip-off solution and the brightening and cleaning wastes.

Comment #4 - Mr. Terry Sampson is currently in charge of the hazardous waste training program for the millwrights and the finishing department personnel. The personnel in the finishing department were given training May 4, 1984, while the millwrights received training May 7, 1984. Mr. Taubert said he is still responsible for training the lab personnel. Records indicate lab technicians were given training on April 30, 1984.

Comment #5 - Mr. Taubert said that Revere hasn't hired any new personnel or reassigned any current employees to handle hazardous waste since the previous inspection.

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C O M M E N T S
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Comment #6 - The principle container storage for the wastewater treatment sludge is located inside the Tube Mill, just south of the wastewater treatment plant. A telephone (which can either be used to summon in-house or off-site help) is located at the wastewater unit. The sludge is transferred to the shipping docks at the east end of the Tube Mill shortly before a hauler is scheduled to pick it up. Mr. Taubert said he will try to limit the sludge's storage time spent on the shipping dock to about 1 day.

Comment #7 - The facility's Contingency Plan was found to be lacking some of the required information in Section 725.156. As noted in 725.152(a), the Contingency Plan must describe actions facility personnel take to comply with Sections 725.151 and 725.156 in response to an emergency involving hazardous waste or hazardous waste constituents. The plan was deficient because it did not address all the elements found in 725.156.

Comment #8 - Revere's response to the October 21, 1984 copper sulfate spill, appeared to have complied with most of the requirements found in Section 725.156.

Comment #9 - The site's operating records were found to be deficient during the March 1, 1984 ISS Inspection, because the physical state of the wastes being stored and the date when the wastes were put in storage were not included. A combination of records kept by Mr. Taubert and logs kept by the millwrights has apparently corrected these deficiencies. Mr. Taubert has files which now includes the waste's physical state. The millwrights are responsible for keeping a running inventory of wastes entering and leaving the container storage area.

Comment #10 - Mr. Taubert has updated his site plan which designates where the wastewater sludge is being stored. The quantity stored in the locations can be obtained from reviewing the millwright's operating records. The facility appears to be in apparent compliance with 725.173(b)(2).

Comment #11 - The facility's closure cost estimate has not been updated within 30 days of its annual anniversary. The last cost estimate by the facility was dated February 8, 1984. Mr. Taubert said the approximate date the first closure cost estimate was July 3, 1981. They are in apparent violation of 725.242(b) for not updating the cost estimate by August 3, 1984.

Comment #12 - Mr. Taubert had said, during the March 1, 1984 ISS Inspection, that Revere's Corporate Headquarters had submitted the Clinton branch's closure plan into the USEPA.

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Clinton/Revere Copper & Brass
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C O M M E N T S
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Comment #13 - The facility's July 27, 1984, response to the Agency's June 21, 1984, Compliance Inquiry Letter indicated that since they were trying to withdraw their Part A as a storage facility, they would not have to comply with the closure regulations. Mr. Taubert was told during the inspection that the facility would have to go through an approved closure before their Part A withdrawal would be accepted. Since there has been no effort to correct the apparent closure violations found during the March 1, 1984 inspection, they are still in apparent violation of the same regulations in Subpart G of 725.

Comment #14 - 725.273(a) indicates a container holding hazardous waste must always be closed during storage unless to add or remove waste. The metal containers being used to accumulate and store the wastewater treatment sludge have no lids. Clear plastic sheets were put over the containers in lieu of lids. This method of "closing" the containers will not prevent any form of leakage or spillage that might occur during handling or storage. It is felt that the facility was not in compliance with the intent of the regulations in using this method.

Comment #15 - The containers which hold wastewater treatment sludge are not used in the transportation of the sludge off-site. Sludge is dumped from the containers into the hauler's open-bed truck. The truck was said to be tarped and then driven to the hazardous waste management facility.

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OBSERVATION REPORT - SITE INVENTORY NO. 03900504 ISS

DeWitt

CO. - L.P.C.

Region # C

Date 03/01/84

Clinton

Revere Copper

(Location)

(Responsible Party)

Samples Taken: Yes () No (x)

Time: From 08:55A m

Weather 28°F cloudy, no

Ground Water () Surface () Other ()

To 04:52P m

Photos Taken: (Yes) (3) No ()

Interviewed A. Taubert &

Inspector R C J

Previous Inspection 4-22-83

Previous Correspondence 2-17-83

Site Open: Yes (x) No ()

OPERATIONAL STATUS:

TYPE OF OPERATION:

AUTHORIZATION:

Operating (x)

Landfill ()

Storage (x)

E.P.A. Permit ()

Temporarily Closed ()

Random Dump ()

Salvage ()

Variance () ISS

Closed Not Covered ()

Other ()

A.C.D. ()

21(e) () Inter

Closed and Covered ()

Quantity Received Daily(1-6)

NA

Board Order ()

IMPROVED

RECEIVED

Illegal (5) ()

Apparent Non-Compliance (5) ()

SAME

JUL 05 1984

DETERIORATED

E.P.A. - D.L.P.C.

I (S) or D S

STATE OF ILLINOIS

GENERAL REMARKS:

I conducted an ISS inspection of the Revere Copper and Brass facility in Clinton on the above date. Interviews at the time were Anthony Taubert, Chief Chemist, and Terry Sampson, Manager of Safety and Worker's Compensation. Because of a prior commitment I left the site for awhile and returned later on the same date to complete the inspection.

The facility was found to be both a storer and large quantity generator of hazardous waste.

INTERVIEW:

During the process of stamping copper and brass and manufacturing copper-bottomed cooking utensils the following hazardous wastes are generated:

- 1) Spent copper plating solution (D002);
- 2) Spent chrome plating solution (D002 + D007);
- 3) Spent stripping solution (D002 + D007);
- 4) Spent brightening solution (D002 + D007);
- 5) Mercurous nitrate waste; and

DIAGRAM:

6) Wastewater treatment sludge (F006).

Three of the above wastes - spent copper plating solution, spent stripping solution and spent brightening solution - are currently sent through one of two reclaiming tanks which electrically remove some of the metals. The resulting scrap metal is sold to a scrap metal dealer.

It was viewed that these wastes were beneficial reclaimed and as such were exempt from Title 725, C.F.R. 122 thru 24 and the RCRA 3010 treatment requirements because of being subject to 721 6(a) 1 & 2. This would mean the temporary storage of these wastes



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MEMORANDUM

TO: Land Division File # 03900504 JUL 05 1984 DATE: 3-1-84FROM: Rich JohnsonE.P.A. - D.L.P.C. ☒ Information only

STATE OF ILLINOIS

SUBJECT: DeWitt Clinton Revere Copper ☐ Response requested

in the two fiber glass holding tanks would not be subject to the 725 tank regulations. All three pass thru the reclaim tanks and into the wastewater treatment (WWT) system. In the wastewater treatment unit the wastewater is neutralized, metals are precipitated out and removed. The WWT unit has a NPDES Permit (No. ^{IL}0002356), but the permit ~~has~~ expired on June of 1981. Revere has sent in for a renewal and continues to send in supply discharge reports and notices of Non-Compliance, according to Roger Cruise of WPC's Compliance Section. WPC also currently has an enforcement case against Revere for not meeting effluent standards. Since WPC still acts as if the NPDES permit is valid (even though it's expired) I continued to regard the treatment unit as being exempt from 725 regulations because of 725.101 (c) 10.

The sludge generated from the WWT unit is placed in a filter press to remove excess water and is then deposited into open rectangular containers. These containers are never closed during the waste's storage period. The waste is loaded into the bed of a ~~or~~ truck operated by Mr. Frank (ILV#0695 or ISWH No. 0079). The waste was said to be ~~carped~~ and sent to Chemetco for ILV#0488438 & ILPC#



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

MEMORANDUM

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TO: Land Division File LPC# 03900504

DATE: 3-1-84

FROM: Rich Johnson

JUL 05 1984

☒ Information only

SUBJECT: DeWitt Co. Clinton/Revere Co. E.P.A. - D.L.P.C. STATE OF ILLINOIS Response requested

11980903) where it is reclaimed. It was learned from Perry Mann (DLPC/FOS in Southern Region) that Chemetec has neither a Developmental Permit or Operating Permit from Land Pollution. EPC currently has a enforcement case against the facility and the USEPA are also supposed to be working up a Compliance Order on them. Mr. Taubert was appraised of the situation. He said he was surprised that Chemetec didn't have the proper permits and that he would contact them. After he contacted Chemetec the facility said they would no longer accept Revere's waste.

The spent chrome solution is generated from a much smaller operation than the copper plating wastes. This waste is sent to a pretreatment unit which adjusts the low pH and converts the hexavalent chrome to trivalent. It is then ~~then~~ released to the WWT unit where it is further treated. As was stated before, the treatment given the waste in the WWT unit was considered to be exempt because of 725.101(c)10.

Mercurous nitrate waste is generated from the facility's lab. It is being stored in 3 clear containers in the manufacturing plant. I should me a letter to Mercury Refine from Albany, New York concerning a discussion about



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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MEMORANDUM

TO: Land Division File LPC# 03900504 DATE: 3-1-84FROM: Rich Johnson☒ Information onlySUBJECT: DeWitt Co. Clinton / Revere Copper☐ Response requested

about the wastes possible reclamation at the company facility. It was requested in the letter sent to Revere that some type of confirmation be shown to us that there will be an arrangement be made for the wastes reclamation. Currently it was felt the waste can be viewed under 721.106(a) 1 & 2 and not be required to have a storage permit.

The facility was found to be in apparent violation of the following regulations:

- 1) 725.116 (d)(2) - job description;
- 2) 725.173 (b)(1) - operating record;
- 3) 725.173 (b)(2) - operating record;
- 4) Several requirements in Part 6 of 725-closure
- 5) 725.273(a) - container regulations; and
- 6) 725.243 - Financial assurances.

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E.P.A. - D.L.P.C.
STATE OF ILLINOIS

It was learned during this inspection that the Facility had at one time 2 surface impoundments in the northeast region for the spent plating solutions. Closure of the impoundments was said to have taken place some time before the RCRA regulations were in place.

Mr. Taubert said Revere's corporate head had notified the USEPA of the impoundment as required by Superfund.

Mr. Taubert said he is trying to get a facility status changed to only large quantity generator or not stor facility and generator as it has been.